

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/576,528
Source: IFWP
Date Processed by STIC: 5/1/06

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 05/01/2006

PATENT APPLICATION: US/10/576,528

TIME: 10:51:53

Input Set : A:\01-3Q Listing-19 Apr 2006.txt

Output Set : N:\CRF4\05012006\J576528.raw

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3 <110> APPLICANT: Schnorr, Kirk Matthew
4      Christensen, Lars Lehmann Hylling
6 <120> TITLE OF INVENTION: Fungal carbohydrate-binding module
8 <130> FILE REFERENCE: 10499.204-US
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/576,528
C--> 10 <141> CURRENT FILING DATE: 2006-04-19
10 <160> NUMBER OF SEQ ID NOS: 9
12 <170> SOFTWARE: PatentIn version 3.3
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 529
16 <212> TYPE: DNA
17 <213> ORGANISM: Pseudoplectania nigrella
20 <220> FEATURE:
21 <221> NAME/KEY: CDS
22 <222> LOCATION: (10)..(531)
24 <400> SEQUENCE: 1
25 gaattcaaaa atg gtc aac ttc acc acc ctc ctc ccg gtt ctt gcc gct ctt      51
26      Met Val Asn Phe Thr Thr Leu Leu Pro Val Leu Ala Ala Leu
27      1          5          10
29 att gga gct gcc aat gcc cac act cgt gtc tac gga ctc tcc gtc aac      99
30 Ile Gly Ala Ala Asn Ala His Thr Arg Val Tyr Gly Leu Ser Val Asn
31 15          20          25          30
33 gat gtc aca tcc tcc ggc acc tcc aat gac aag gcc gtc gct tct tcc      147
34 Asp Val Thr Ser Ser Gly Thr Ser Asn Asp Lys Ala Val Ala Ser Ser
35          35          40          45
37 agt att gcg gcc gtg gac cct gtg acc agc tcc gtc gta gcc tct gtt      195
38 Ser Ile Ala Ala Val Asp Pro Val Thr Ser Ser Val Val Ala Ser Val
39          50          55          60
41 cag gtc cct aac ttc act gcc act gac gtc ccc act ttt act gcc acc      243
42 Gln Val Pro Asn Phe Thr Ala Thr Asp Val Pro Thr Phe Thr Ala Thr
43          65          70          75
45 gac atc cct act ttc act gct act gat gtt cct atc ttc acc aag aag      291
46 Asp Ile Pro Thr Phe Thr Ala Thr Asp Val Pro Ile Phe Thr Lys Lys
47          80          85          90
49 ccc caa cag ccc tca act tta ttg acc cgc acc cgt acc cat gcc tct      339
50 Pro Gln Gln Pro Ser Thr Leu Leu Thr Arg Thr Arg Thr His Ala Ser
51 95          100          105          110
53 gtt tca ttc gtc gct aag ccc tcc gct ttt att ccc aag cct tcc gcg      387
54 Val Ser Phe Val Ala Lys Pro Ser Ala Phe Ile Pro Lys Pro Ser Ala
55          115          120          125
57 agc aca atc ccg tca aag ccc aag act ccc gaa gag gtt aat aag tgc      435
58 Ser Thr Ile Pro Ser Lys Pro Lys Thr Pro Glu Glu Val Asn Lys Cys
59          130          135          140

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61 ctt gac gct gtc aac gcc tgt att aca cag gcc cag agc tcc att gga      483
62 Leu Asp Ala Val Asn Ala Cys Ile Thr Gln Ala Gln Ser Ser Ile Gly
63      145                      150                      155
65 gga gtt gtc aac ttt gag cct tgc gag agc cag aga gct ctt tgc tat      531
66 Gly Val Val Asn Phe Glu Pro Cys Glu Ser Gln Arg Ala Leu Cys Tyr
67      160                      165                      170
69 taggaactgc aagaatctg gggggatggt agcgaggttg agaggtggag gagcggagga      591
71 gtaggggagg tgagatggag taagattaag cggccgca      629
74 <210> SEQ ID NO: 2
75 <211> LENGTH: 174
76 <212> TYPE: PRT
77 <213> ORGANISM: Pseudoplectania nigrella
79 <400> SEQUENCE: 2
81 Met Val Asn Phe Thr Thr Leu Leu Pro Val Leu Ala Ala Leu Ile Gly
82 1      5      10      15
85 Ala Ala Asn Ala His Thr Arg Val Tyr Gly Leu Ser Val Asn Asp Val
86      20      25      30
89 Thr Ser Ser Gly Thr Ser Asn Asp Lys Ala Val Ala Ser Ser Ser Ile
90      35      40      45
93 Ala Ala Val Asp Pro Val Thr Ser Ser Val Val Ala Ser Val Gln Val
94      50      55      60
97 Pro Asn Phe Thr Ala Thr Asp Val Pro Thr Phe Thr Ala Thr Asp Ile
98 65      70      75      80
101 Pro Thr Phe Thr Ala Thr Asp Val Pro Ile Phe Thr Lys Lys Pro Gln
102      85      90      95
105 Gln Pro Ser Thr Leu Leu Thr Arg Thr Arg Thr His Ala Ser Val Ser
106      100     105     110
109 Phe Val Ala Lys Pro Ser Ala Phe Ile Pro Lys Pro Ser Ala Ser Thr
110     115     120     125
113 Ile Pro Ser Lys Pro Lys Thr Pro Glu Glu Val Asn Lys Cys Leu Asp
114     130     135     140
117 Ala Val Asn Ala Cys Ile Thr Gln Ala Gln Ser Ser Ile Gly Gly Val
118 145     150     155     160
121 Val Asn Phe Glu Pro Cys Glu Ser Gln Arg Ala Leu Cys Tyr
122     165     170
125 <210> SEQ ID NO: 3
126 <211> LENGTH: 31
127 <212> TYPE: DNA
128 <213> ORGANISM: Pseudoplectania nigrella
131 <220> FEATURE:
W--> 132 <221> NAME/KEY: misc_feature Primer NP887U1
133 <222> LOCATION: (1)..(31)
135 <400> SEQUENCE: 3
136 gacatcgttg acggagagtc cgtagacag a      31
139 <210> SEQ ID NO: 4
140 <211> LENGTH: 34
141 <212> TYPE: DNA
142 <213> ORGANISM: Pseudoplectania nigrella
145 <220> FEATURE:

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W--> 146 <221> NAME/KEY: misc_feature Primer NP887D1
      147 <222> LOCATION: (1)..(34)
      149 <400> SEQUENCE: 4
      150 acatcctccg gcacctccaa tgacaaggcc gtcg 34
      153 <210> SEQ ID NO: 5
      154 <211> LENGTH: 21
      155 <212> TYPE: DNA
      156 <213> ORGANISM: Artificial
      158 <220> FEATURE:
      159 <223> OTHER INFORMATION: Primer PNA2I
      162 <220> FEATURE:
W--> 163 <221> NAME/KEY: misc_feature Primer PNA2I
      164 <222> LOCATION: (1)..(21)
      166 <400> SEQUENCE: 5
      167 gtttccaact caatttacct c 21
      170 <210> SEQ ID NO: 6
      171 <211> LENGTH: 32
      172 <212> TYPE: DNA
      173 <213> ORGANISM: Artificial
      175 <220> FEATURE:
      176 <223> OTHER INFORMATION: Primer NP887Dau1
      179 <220> FEATURE:
W--> 180 <221> NAME/KEY: misc_feature Primer NP887Dau1
      181 <222> LOCATION: (1)..(32)
      183 <400> SEQUENCE: 6
      184 ccaaagcttt tcacctccg gcacctccaa tg 32
      187 <210> SEQ ID NO: 7
      188 <211> LENGTH: 32
      189 <212> TYPE: DNA
      190 <213> ORGANISM: Artificial
      192 <220> FEATURE:
      193 <223> OTHER INFORMATION: Primer N887Dau2
      196 <220> FEATURE:
W--> 197 <221> NAME/KEY: misc_feature Primer NP887Dau2
      198 <222> LOCATION: (1)..(32)
      200 <400> SEQUENCE: 7
      201 gcgaagctta atcttactcc atctcacctc cc 32
      204 <210> SEQ ID NO: 8
      205 <211> LENGTH: 573
      206 <212> TYPE: DNA
      207 <213> ORGANISM: Pseudoplectania nigrella
      210 <220> FEATURE:
      211 <221> NAME/KEY: CDS
      212 <222> LOCATION: (1)..(570)
      213 <223> OTHER INFORMATION: Positions 1-57 Candida lipase signal peptide, positions 58-
147 214 Candida lipase sequence, positions 148-570 P. nigrella CBM
      215 polypeptide.
      217 <400> SEQUENCE: 8
      218 atg aag cta ctg tct ctg acc ggt gtg gct ggt gtg ctt gcg act tgc 48

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219 Met Lys Leu Leu Ser Leu Thr Gly Val Ala Gly Val Leu Ala Thr Cys
220 1 5 10 15
222 gtt gca gcc act cct ttg gtg aag tgc gca act agt ggc cat tac ggc 96
223 Val Ala Ala Thr Pro Leu Val Lys Cys Ala Thr Ser Gly His Tyr Gly
224 20 25 30
226 ctg gcg agg ccg cct cgg ccc caa cga att ctt gga ata tta agc ttt 144
227 Leu Ala Arg Pro Pro Arg Pro Gln Arg Ile Leu Gly Ile Leu Ser Phe
228 35 40 45
230 tca tcc tcc ggc acc tcc aat gac aag gcc gtc gct tct tcc agt att 192
231 Ser Ser Ser Gly Thr Ser Asn Asp Lys Ala Val Ala Ser Ser Ser Ile
232 50 55 60
234 gcg gcc gtg gac cct gtg acc agc tcc gtc gta gcc tct gtt cag gtc 240
235 Ala Ala Val Asp Pro Val Thr Ser Ser Val Val Ala Ser Val Gln Val
236 65 70 75 80
238 cct aac ttc act gcc act gac gtc ccc act ttt act gcc acc gac atc 288
239 Pro Asn Phe Thr Ala Thr Asp Val Pro Thr Phe Thr Ala Thr Asp Ile
240 85 90 95
242 cct act ttc act gct act gat gtt cct atc ttc acc aag aag ccc caa 336
243 Pro Thr Phe Thr Ala Thr Asp Val Pro Ile Phe Thr Lys Lys Pro Gln
244 100 105 110
246 cag ccc tca act tta ttg acc cgc acc cgt acc cat gcc tct gtt tca 384
247 Gln Pro Ser Thr Leu Leu Thr Arg Thr Arg Thr His Ala Ser Val Ser
248 115 120 125
250 ttc gtc gct aag ccc tcc gct ttt att ccc aag cct tcc gcg agc aca 432
251 Phe Val Ala Lys Pro Ser Ala Phe Ile Pro Lys Pro Ser Ala Ser Thr
252 130 135 140
254 atc ccg tca aag ccc aag act ccc gaa gag gtt aat aag tgc ctt gac 480
255 Ile Pro Ser Lys Pro Lys Thr Pro Glu Glu Val Asn Lys Cys Leu Asp
256 145 150 155 160
258 gct gtc aac gcc tgt att aca cag gcc cag agc tcc att gga gga gtt 528
259 Ala Val Asn Ala Cys Ile Thr Gln Ala Gln Ser Ser Ile Gly Gly Val
260 165 170 175
262 gtc aac ttt gag cct tgc gag agc cag aga gct ctt tgc tat tag 573
263 Val Asn Phe Glu Pro Cys Glu Ser Gln Arg Ala Leu Cys Tyr
264 180 185 190
267 <210> SEQ ID NO: 9
268 <211> LENGTH: 190
269 <212> TYPE: PRT
270 <213> ORGANISM: Pseudoplectania nigrella
272 <400> SEQUENCE: 9
274 Met Lys Leu Leu Ser Leu Thr Gly Val Ala Gly Val Leu Ala Thr Cys
275 1 5 10 15
278 Val Ala Ala Thr Pro Leu Val Lys Cys Ala Thr Ser Gly His Tyr Gly
279 20 25 30
282 Leu Ala Arg Pro Pro Arg Pro Gln Arg Ile Leu Gly Ile Leu Ser Phe
283 35 40 45
286 Ser Ser Ser Gly Thr Ser Asn Asp Lys Ala Val Ala Ser Ser Ser Ile
287 50 55 60
290 Ala Ala Val Asp Pro Val Thr Ser Ser Val Val Ala Ser Val Gln Val

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291	65				70				75				80			
294	Pro	Asn	Phe	Thr	Ala	Thr	Asp	Val	Pro	Thr	Phe	Thr	Ala	Thr	Asp	Ile
295					85				90						95	
298	Pro	Thr	Phe	Thr	Ala	Thr	Asp	Val	Pro	Ile	Phe	Thr	Lys	Lys	Pro	Gln
299					100				105						110	
302	Gln	Pro	Ser	Thr	Leu	Leu	Thr	Arg	Thr	Arg	Thr	His	Ala	Ser	Val	Ser
303					115				120						125	
306	Phe	Val	Ala	Lys	Pro	Ser	Ala	Phe	Ile	Pro	Lys	Pro	Ser	Ala	Ser	Thr
307					130				135						140	
310	Ile	Pro	Ser	Lys	Pro	Lys	Thr	Pro	Glu	Glu	Val	Asn	Lys	Cys	Leu	Asp
311	145								150						155	
314	Ala	Val	Asn	Ala	Cys	Ile	Thr	Gln	Ala	Gln	Ser	Ser	Ile	Gly	Gly	Val
315					165										170	
318	Val	Asn	Phe	Glu	Pro	Cys	Glu	Ser	Gln	Arg	Ala	Leu	Cys	Tyr		
319					180				185						190	

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/01/2006
PATENT APPLICATION: US/10/576,528 TIME: 10:51:54

Input Set : A:\01-SQ Listing-19 Apr 2006.txt
Output Set: N:\CRF4\05012006\J576528.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:5,6,7

VERIFICATION SUMMARY

DATE: 05/01/2006

PATENT APPLICATION: US/10/576,528

TIME: 10:51:54

Input Set : A:\01-SQ Listing-19 Apr 2006.txt

Output Set: N:\CRF4\05012006\J576528.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:132 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3

L:146 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:4

L:163 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:5

L:180 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:6

L:197 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7